



# Montgomery County Government Post-Employment Medical Benefits

Actuarial Valuation to Determine  
Actuarially Determined Contribution

For FYE 2020 and FYE 2021

# Bolton

*Submitted by:*

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Employee Benefits, Actuarial & Investment Consulting

October 11, 2019

Kay Russell Deerin  
Group Insurance Fund Manager  
Office of Human Resources  
101 Monroe Street, 12<sup>th</sup> Floor, Room 1209  
Rockville, MD 20850

Dear Kay:

The following sets forth the Actuarially Determined Contribution (ADC) for Montgomery County Government for the Fiscal Year Endings June 30, 2020 and June 30, 2021. The GASB 75 employer accounting and GASB 74 Plan Accounting disclosures are provided in a separate report.

The ADC has decreased from \$116,737,000 in FYE 2019 (as provided by the prior actuary Aon) to \$72,150,000 for FYE 2020. The decrease is largely due to favorable claims experience including lower projected prescription drug prices starting in 2020 due to a prescription drug renewal, updating the long-term medical trend assumption, and new assumptions due to the 2019 pension plan experience study.

Section I is meant to give a high level of summary of the OPEB valuation. Sections II – IV includes information used to determine the ADC. Section V summarizes the valuation data, Section VI the plan provisions, and Section VII the actuarial methods and assumptions.

This report has been prepared for Montgomery County Government for the purposes of determining the FYE 2020 and 2021 ADC. It is neither intended nor necessarily suitable for other purposes. Bolton is not responsible for the consequences of any other use or the reliance by another party.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

The report is based on July 1, 2019 census data. The census data and medical premiums for fiscal year 2019 were submitted by Montgomery County Government. In preparing the valuation we relied on demographic and claims data provided by Montgomery County Government. We reviewed the data for reasonableness but did not audit the data. The actuarial methods and assumptions used in this report comply with ASOP 6 and the actuarial standards of practice promulgated by the American Academy of Actuaries.

Future medical care cost increase rates are unpredictable and could be volatile. They will depend upon the economy, future health care delivery systems and emerging technologies. The trend rate selected is based on an economic model developed by a health care economist for the Society of Actuaries. Future medical trend increases could vary significantly from the model. Model inputs will be updated periodically based on the best estimate of the economy at that time. Small changes in the model inputs can result in actuarial losses or gains of 5 to 15 percent of liabilities.

Bolton Partners is completely independent of Montgomery County Government, its programs, activities, or any of its officers or key personnel. We and anyone closely associated with us does not have any relationship which would impair our independence on this assignment.

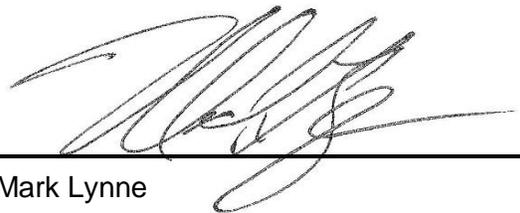
Kevin Binder is a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Respectfully submitted,



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# Section I Executive Summary

## Background

Bolton Partners, Inc. has prepared the following report that sets forth the FYE 2020 and FYE 2021 Actuarial Determined Contribution (ADC) for Montgomery County Government. In June 2015, the Government Accounting Standards Board (GASB) released Statements 74 and 75, which went into effect in FYE 2017 and FYE 2018.

While the GASB74 and GASB75 accounting results are provided in a separate report, Section 4 does include an ADC allocation of the agencies that is used to allocate the June 30, 2019 GASB74 accounting liabilities for the FY2020 GASB75 employer reporting.

The new accounting standard has separated budgeting and accounting. Montgomery County Government has elected to set the Actuarially Determined Contribution (ADC) to equal the Normal cost, plus administrative expenses, plus a 30-year open amortization of the unfunded actuarial accrued liability. The impact of improved longevity is also being phased in over a 5-year period. This report provides the ADC results for FYE 2020 and FYE 2021.

The last valuation report, which developed the FYE 2020 and FYE 2021 ADC, was completed by the prior actuary Aon.

## Contribution Policy

Montgomery County Government's contribution policy is to contribute the ADC to a trust established to pre-fund these benefits.

## Expected Rate of Return Assumption

The expected rate of return assumption of 7.50% was selected by the plan sponsor.

## Assets

Asset information as of July 1, 2019 and the asset reconciliation for the fiscal year ending 2019 was provided by Montgomery County Government.

The total market value of assets in the Retiree Health Benefits Trust is \$1,079,488,683. For purposes of this valuation, Montgomery County Public Schools and Montgomery College assets were excluded. The following chart summarizes the total assets in trust by group:

	Government	Schools	College	Total
Market Value as of July 1, 2019	553,755,856	467,409,659	58,323,168	1,079,488,683
Percentage of Total Assets	51.3%	43.3%	5.4%	100.0%

## Improved Longevity Amortization

In 2017, an amortization base was set up to smooth the impact of improved longevity over 5 years. The effect the mortality table change had on the ADC as of 7/1/2017 was an increase in the ADC of \$9,351,000 as reported by Aon. This increase was phased in over a 5-year period at \$1,870,000 per year and is shown as an adjustment to the ADC in our results section. The mortality change increase will be fully included in the FYE 2022 ADC..

## Section I Executive Summary

### Comparison with Previous Valuation

The prior valuation was based on July 1, 2018 data and completed by the prior actuary Aon. The Actuarially Determined Contribution (ADC) has decreased for FYE 2020. The decrease is mainly due to favorable claims experience, the impact of the new negotiated pharmacy rebate pricing, and updating long-term medical trend assumption.

The following table reconciles the expense.

<b>FYE 2020 Reconciliation 7.50% Discount Rate (Results \$000)</b>	
	<b>FYE 2020 ADC</b>
2018 Report (FYE 2020 ADC calculated by AON)	\$116,737
Expected Increase	(\$10,571)
Increase due to data, assets and change in Actuary	\$13,362
Increase due to claims experience	(\$10,586)
Increase due to new Pharma RFP response	(\$16,711)
Increase due to elimination of Cadillac tax	(\$1,331)
Increase due to new trend	(\$13,429)
Increase due to lives based mortality	(\$1,699)
Increase due to OPEB specific DROP assumption	(\$2,116)
Increase due to new demographic assumptions	(\$1,506)
<b>2019 Report (FYE 2020 ADC)</b>	<b>\$72,150</b>

# Section I Executive Summary

## Plan Provisions

Employees who retire or become disabled from Montgomery County are eligible for medical and life insurance benefits from the plan. Eligible spouses and dependents of participants may be covered under this Plan and are entitled to receive the same subsidy as the participant.

Retirees receive a subsidy from Montgomery County Government. The subsidy is based on the participant's date of hire and creditable service and ranges from 50% to 80%. Please see Section VI for more details.

## Demographic Data

Demographic data as of July 1, 2019 was provided to us by Montgomery County Government. Although we have not audited this data, we have no reason to believe that it is inaccurate.

## Claims Data

Monthly paid claims and enrollment for employees and retirees from May 1, 2018 to April 30, 2019 were supplied by the carrier. Although we have not audited the claims data, we have no reason to believe that it is inaccurate.

## Impact of Health Care Reform

We have not adjusted the pre-65 medical care trend due to the projected impact of the "Cadillac Tax". While we are required to do for accounting purposes under GASB and the actuarial standards of practice, there are no such requirements for an actuarially determined contribution for an OPEB plan.

There are other provisions of the ACA that could impact future costs. Some of the provisions (for example risk adjustment charges for plans that cover healthier populations) could increase costs, while others (for example, less uninsured care costs might be passed on to those with insurance) may reduce costs over time. Because the impact of these provisions is unclear at this time, we have made no other adjustments to the medical care trend.

## Section I Executive Summary

### Implicit Subsidy

The published insurance rates for persons prior to Medicare eligibility are based primarily on the healthcare usage of active employees. Since retirees use healthcare at a rate much higher than employees, using these blended rates creates an implicit subsidy for the retiree group. ASOP 6 requires that the claims assumption we use for this valuation be based on the actual per-capita retiree cost. The difference between the actual usage of healthcare by retirees and the assumption built into the published rates is identified as the implicit subsidy amount.

### Demographic Assumptions

Most of the demographic assumptions are based on those used for the Montgomery County Employees' Retirement System. The assumptions detailed in this report were based on the 2019 experience review performed by GRS with the exception of the mortality assumption. The headcount weighted version of the mortality tables discussed in the experience review was used in lieu of the liability weighted version of the mortality tables for purposes of this valuation.

The experience study included separate DROP exit retirement assumptions for groups E,F, and G for use in OPEB valuations that were used for this valuation.

Please see section VII which details the assumptions for electing coverage.

### Economic Assumptions

The discount rate assumption is tied to the return expected on the funds used to pay these benefits. The discount rate assumption of 7.50% is the long term expected return on trust assets and is unchanged from the prior actuarial report.

The medical trend assumption was developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model, version 2019\_b. The SOA model is flexible and allows for adjustments that ultimately control how quickly the current trend converges to the percentage increase in the GDP. Montgomery County has selected the following assumptions were used as input variables into the SOA model:

Rate of Inflation	2.4%
Rate of Growth in Real Income / GDP per capita	1.25%
Excess Medical Growth	1.2%
Expected Health Share of GDP in 2028	20.5%
Health Share of GDP Resistance Point	15.0%
Year for Limiting Cost Growth to GDP Growth	2040

The SOA Long-Run Medical Cost Trend Model and its projection are based on an econometric analysis of historical U.S. medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of an SOA Project Oversight Group.

The pre-65 medical trend was not increased to reflect the impact of the Cadillac Tax.

Payroll is assumed to increase at 3.0% per annum. This assumption is used to determine the level percentage of payroll amortization factor.

## Section II FYE 2020 and FYE 2021 Determination of ADC

Below is a summary of the calculation of the Plan's ADC as of June 30, 2019 and June 30, 2020 under current plan provisions using a 7.50% discount rate.

	FYE 2020	FYE 2021
(1) Expected Rate of Return	7.50%	7.50%
(2) Accrued Liability		
(a) Employees	\$ 514,232,000	\$ 543,715,000
(b) Retirees	638,910,000	675,541,000
<b>(c) Totals (a + b)</b>	<b>1,153,142,000</b>	<b>1,219,256,000</b>
(3) Actuarial Value of Assets	553,756,000	611,165,000
<b>(4) Unfunded Accrued Liability (UAL) (2(c) – 3)</b>	<b>599,386,000</b>	<b>608,091,000</b>
(5) Actuarially Determined Contribution (ADC)		
(a) Normal Cost	35,530,000	36,838,000
(b) Amortization of Unfunded Accrued Liability	34,715,000	35,219,000
(c) Administrative Expense	350,000	361,000
(d) Interest (7.50% x (a + b + c))	<u>5,295,000</u>	<u>5,431,000</u>
(e) Total ADC (a + b + c + d)	75,890,000	77,849,000
(e) Adjustment to ADC for Mortality Phase-In	(3,740,000)	(1,870,000)
<b>(g) Total ADC (e + f)</b>	<b>72,150,000</b>	<b>75,979,000</b>
(6) Expected Trust Contribution		
(a) Adjusted ADC (5(g))	72,150,000	75,979,000
(b) Expected Pay-Go Benefits	(56,487,000)	(61,808,000)
<b>(c) Expected Trust Contribution (a + b)</b>	<b>\$15,663,000</b>	<b>\$14,171,000</b>

# Section III Expected Benefit Payments

## Estimated Future Benefit Payouts

Below is a 10-year projected benefit payout stream.

Plan Year Ending 6/30	Expected Benefit Payments
2020	\$56,487,000
2021	61,808,000
2022	67,236,000
2023	72,915,000
2024	78,568,000
2025	84,560,000
2026	90,502,000
2027	95,953,000
2028	101,661,000
2029	107,481,000

Please note:

- The expected benefit payment stream shown above assumes that the covered population is a closed group, i.e. there are no new entrants or re-entrants.
- The Plan's actual benefit payments may be greater or lesser than the amounts shown, depending on actual demographic experience and claims experience.

## Section IV ADC by Agency

### Agency Allocation (\$000s)

Below is an allocation of the ADC by employers. These amounts will be used to allocate the June 30, 2019 measurement date GASB74 liabilities. Since the County has selected a beginning of the year measurement date for GASB75, these allocation percentages will be used to prepare the FY2020 GASB75 disclosures.

	ADC	Percent by Agency	June 30, 2019 Net OPEB Liability Allocated To Agency
County	\$70,154	97.23%	\$829,830
Assessment and Taxation	\$104	0.14%	\$1,228
Credit Union	\$112	0.16%	\$1,325
Housing Opportunities	\$1,419	1.97%	\$16,781
Revenue Authority	\$248	0.34%	\$2,936
Strathmore Hall	\$73	0.10%	\$862
Friendship Heights	\$27	0.04%	\$320
Washington Suburban	\$13	0.02%	\$150
<b>Total</b>	<b>\$72,150</b>	<b>100.00%</b>	<b>\$853,432</b>

## Section V Valuation Data

### Counts – Employees and Retirees

The following table summarizes the participant counts and ages, as of 7/1/2019, for the population:

	Count	Average Age	Average Service
(1) Active Participants			
(a) Plan A	658	53.81	19.02
(b) Plan E	491	42.73	12.06
(c) Plan F	1,288	40.31	14.32
(d) Plan G	1,220	39.69	13.2
(e) Plan H	464	59.36	29.01
(f) Plan J	131	47.01	13.76
(g) GRIP	6,187	48.41	9.27
<b>(h) Total</b>	<b>10,439<sup>1</sup></b>	<b>46.93</b>	<b>12.03</b>
(2) Retiree Statistics – Participants with Medical Benefits			
(a) Pre-Medicare	1,721	58.43	N/A
(b) Medicare	3,851	74.47	N/A
<b>(c) Total</b>	<b>5,572</b>	<b>69.52</b>	<b>N/A</b>
(3) Retiree Statistics – Participants with Life Benefits			
(a) Pre-Medicare	1,955	58.41	N/A
(b) Medicare	4,413	74.28	N/A
<b>(c) Total</b>	<b>6,368</b>	<b>69.41</b>	<b>N/A</b>

<sup>1</sup> This count does not include 98 people who are ineligible for the post-employment medical plan due to their employment at an agency that does not offer OPEB benefits.

## Section V Valuation Data

### Active Age - Service Distribution

Shown below is a distribution based on age and service of all eligible active employees as of July 1, 2019.

Age	Years of Service as of 7/1/2019								Total
	Under 1	01-04	05-09	10-14	15-19	20-24	25-29	30+	
Under 25	71	84	13	0	0	0	0	0	168
25 - 29	131	444	211	10	0	0	0	0	796
30 - 34	124	453	415	173	5	0	0	0	1,170
35 - 39	84	336	273	419	134	1	0	0	1,247
40 - 44	94	245	205	300	295	83	1	0	1,223
45 - 49	77	255	186	283	301	206	123	7	1,438
50 - 54	48	182	147	275	237	187	230	79	1,385
55 - 59	47	179	166	258	249	138	141	150	1,328
60 - 64	29	102	121	200	189	126	84	142	993
65 & Up	12	42	78	146	125	100	64	124	691
<b>Total</b>	<b>717</b>	<b>2,322</b>	<b>1,815</b>	<b>2,064</b>	<b>1,535</b>	<b>841</b>	<b>643</b>	<b>502</b>	<b>10,439</b>

### Participant Agency

Shown below is a distribution of the employee and retiree population by participating agency as of July 1, 2019.

Agency	Actives	Retirees	Total
Montgomery County Government	9,970	6,947	16,917
State Department of Assessment and Taxation	0	19	19
Montgomery County Employees Federal Credit Union	28	10	38
Housing Opportunities Commission of Montgomery County	328	167	495
Montgomery County Revenue Authority	61	25	86
Strathmore Hall Foundation, Inc.	44	8	52
Village of Friendship Heights	6	1	7
Washington Suburban Transit Commission	2	2	4
<b>Total</b>	<b>10,439</b>	<b>7,179</b>	<b>17,618</b>

## Section V Valuation Data

### Retiree Age – Medical Coverage Distribution

Shown below is a distribution based on age of retiree participants who are currently receiving medical benefits from the Montgomery County.

Age	Individual	Individual with Spouse	Total
Less Than 45	22	25	47
45 – 50	19	66	85
50 – 55	71	186	257
55 – 60	166	311 00	477
60 – 65	331	524	855
65 – 70	544	668	1,212
70 – 75	540	601	1,141
75 – 80	385	323	708
80 or more	558	232	790
<b>Total</b>	<b>2,636</b>	<b>2,936</b>	<b>5,572</b>

### Retiree Age – Life Coverage Distribution

Shown below is a distribution based on age of retiree participants who are currently receiving life insurance benefits from the Montgomery County.

Age	Total
Less Than 45	52
45 – 50	101
50 – 55	309
55 – 60	534
60 – 65	959
65 – 70	1,401
70 – 75	1,347
75 – 80	835
80 or more	830
<b>Total</b>	<b>6,368</b>

## Section VI Summary of Principal Plan Provisions

The following summary describes principal plan provisions assumed in calculating the cost of this Plan.

In order to receive retiree medical benefits from the Montgomery County Government (the “Plan”), an employee of must:

- (1) Retire directly from the County
- (2) Be covered by the County group health plan for active employees at retirement
- (3) Meet certain age and service requirements as detailed in the eligibility sections below
- (4) Be employed by a group that offers post-employment medical coverage. The following groups offer benefits to participants *only* while in active employment. Therefore, all participants in the following groups are excluded from the post-employment medical and life plan:
  - Arts & Humanities
  - Bethesda Urban Partnership
  - Chevy Chase View
  - Volunteer Fire and Rescue Association
  - Television
  - Parole & Probation
  - Town of Somerset

An eligible participant may cover themselves and their eligible dependents in the County Plan. Participating dependents are also entitled to continue coverage under the Plan after the death of the retired employee.

### Membership Groups

**Group A:** Any employee who is not eligible for coverage under another membership group

**Group E:** Sworn deputy sheriffs and such correctional staff as designated by the chief administrative officer.

**Group F:** Sworn police officers

**Group G:** Firefighters, fire officers, and rescue service personnel

**Group H:** Any member who holds a bargaining unit position not in groups E, F, or G

**Group J:** This group was established December 21, 2016. Non-correctional officer employees hired prior to December 21, 2016 who participated in Group E were transferred to Group J.

**GRIP:** Guaranteed Retirement Income Plan. Employees hired after October 1, 1994 and are

- unrepresented employees
- a non-public safety employee represented by MCGEO or
- an elected official.

Participate in the GRIP Plan.

## Section VI Summary of Principal Plan Provisions

### Retirement Eligibility

Below is a summary of the normal and early retirement eligibility conditions from the Montgomery County Employees' Retirement System.

#### Group A and H (Non-Public Safety) – earlier of

- Age 60 with 5 years of creditable service (Normal Retirement)
- Age 55 with 30 years of creditable service (Normal Retirement)
- Age 50 with 15 years of creditable service (Early Retirement)
- Age 45 with 20 years of creditable service (Early Retirement)

#### Group E and J (Public Safety) – earlier of

- Age 55 with 15 years of creditable service (Normal Retirement)
- Age 46 with 25 years of creditable service (Normal Retirement)
- Age 45 with 15 years of creditable service (Early Retirement)
- Age 41 with 20 years of creditable service (Early Retirement)

#### Group F (Public Safety) – earlier of

- Age 55 with 15 years of creditable service (Normal Retirement)
- 25 years of creditable service (Normal Retirement)
- Age 45 with 15 years of creditable service (Early Retirement)
- Age 41 with 20 years of creditable service (Early Retirement)

### Retirement Eligibility

#### Group G (Public Safety) – earlier of

- Age 55 with 15 years of creditable service (Normal Retirement)
- 20 years of creditable service (Normal Retirement)

#### GRIP –

- Participants are considered 100% vested in County contributions after attaining 3 years of service, but there is a 10% penalty for all distributions that occur before age 55. For purposes of the valuation, we assumed that retirement would occur at age 55 with 3 years of service.

### Disability Retirement

There is no age or service requirement for service-connected disabilities. For all disabilities that are not service-connected, participants must have 5 years of service to be eligible for a benefit.

## Section VI Summary of Principal Plan Provisions

### Employer Subsidy

Montgomery County Government subsidizes a portion of the total premium for retirees, spouses, and their dependents. The percentage paid is based on date of hire and years of service as described below.

- Participants hired before January 1, 1987 are eligible to receive an 80% subsidy upon retirement.
- Participants hired on or after January 1, 1987 are eligible to receive a subsidy based on years of creditable service as follows:

Years of Creditable Service	Employer Subsidy
Less than 5	0%
5	50%
6	52%
7	54%
8	56%
9	58%
10	60%
11	62%
12	64%
13	66%
14	68%
15 or more	70%

Surviving spouses and dependent children who are covered under the plan are allowed to continue coverage under the plan and receive the same subsidy as the retiree.

### Life Insurance

Prior to age 65, the basic life insurance amount is equal to the annual base pay before retirement limited to \$200,000. The life insurance amount is reduced by 10% on each anniversary of retirement for 5 years. The life insurance amount will never be less than 25% of the annual base pay immediately prior to retirement.

At age 65, the amount of life insurance is reduced to 25% of the annual base pay immediately prior to retirement

### Medical Plan Description

Montgomery County offers four comprehensive medical plans for retirees and four prescription plans. Retirees make separate elections for medical and prescription coverage. Upon the attainment of age 65, Medicare becomes the primary medical insurance and the County's medical plan becomes the secondary. Participants are also required to enroll in Medicare Part A and Part B.

## Section VI Summary of Principal Plan Provisions

Benefit	Kaiser Permanente	United HealthCare	POS Standard	POS High
Allergy Testing	\$5 copay	\$5 copay PCP \$10 copay Specialist	In-Network: Covered in full Out-of-Network: 80% covered after deductible.	In-Network: Covered in full Out-of-Network: 80% covered after deductible
Deductible	None	None	In-Network: None Out-of-Network: \$300 individual; \$600 family.	In-Network: None Out-of-Network: \$300 individual; \$600 family.
Diagnostic/Lab/XRay	Covered in full.	Covered in full.	In-Network: Covered in full Out-of-Network: 80% covered after deductible.	In-Network: Covered in full Out-of-Network: 80% covered after deductible.
Dr. Office Visits (includes Virtual Visits)	\$5 copay	\$5 copay PCP \$10 copay Specialist	In-Network: \$15 copay Out-of-Network: 80% covered after deductible.	In-Network: \$10 copay Out-of-Network: 80% covered after deductible.
Emergency Room	\$50 copay waived if admitted to hospital	\$25 copay waived if admitted to hospital. \$15 copay for urgent care.	In-Network: \$35 copay waived if admitted to hospital; Out-of-Network: 80% covered after deductible	In-Network: \$25 copay waived if admitted to hospital Out-of-Network: 80% covered after deductible
Hearing Aids	For minor children. One hearing aid for each hearing impaired ear once every 36 months	For minor children. One hearing aid for each hearing impaired ear once every 36 months	In-Network/Out-of-Network: For minor children, one hearing aid for each hearing impaired ear once every 36 months	In-Network/Out-of-Network: For minor children, one hearing aid for each hearing impaired ear once every 36 months
Hearing Screening	\$5 copay for hearing exam (hearing aids are excluded)	\$5 Copay PCP \$10 Copay Specialist	In-Network: Childhood hearing screening covered in full Out-of-Network: Child hood hearing screening, 80% not subject to deductible.	In-Network: Childhood hearing screening covered in full Out-of-Network: Child hood hearing screening, 80% not subject to deductible.

## Section VI Summary of Principal Plan Provisions

Benefit	Kaiser Permanente	United HealthCare	POS Standard	POS High
Home Health Care Services	Covered in full if medically necessary.	Covered in full. No copayment. 60 visit maximum for skilled care services per calendar year.	In-Network: Covered in full (90 visits max/calendar year) Out-of-Network: 80% covered after deductible (90 visits max/calendar year)	In-Network: Covered in full (90 visits max/calendar year) Out-of-Network: 80% covered after deductible (90 visits max/calendar year)
Hospice	Covered in full.	Covered in full. (See coverage booklet for eligibility information).	In-Network: Covered in full Out-of-Network: 80% covered after deductible.	In-Network: Covered in full Out-of-Network: 80% covered after deductible.
Hospital	Covered in full.	Covered in full.	In-Network: Covered in full after \$150 copay per admission; Out-of-Network: 80% covered after deductible	In-Network: Covered in full Out-of-Network: 80% covered after deductible
Immunizations	Included in well child care visits up to age 5 at no charge.	\$5 copay PCP	In-Network: Covered in full Out-of-Network: 80% covered after deductible	In-Network: Covered in full Out-of-Network: 80% covered after deductible
In vitro Fertilization	Limited to 3 attempts per live birth. Lifetime maximum of \$100,000	Limited to 3 attempts per live birth. Lifetime maximum of \$100,000.	In-Network/Out-of-Network: Limited to 3 attempts per live birth. Lifetime maximum of \$100,000.	In-Network/Out-of-Network: Limited to 3 attempts per live birth. Lifetime maximum of \$100,000.
Mammography - Preventive Screening Schedule	Schedule consistent with the current recommendations of the American College of Physicians.	Covered in full. Age 35-39; one baseline mammogram; Age 40-49; one mammogram every two calendar years; Age 50+ one mammogram per calendar year.	In-Network/Out-of-Network: Covered in full. Age 35-39: one baseline mammogram; Age 40-49; One mammogram every two calendar years; Age 50+ One mammogram per calendar year.	In-Network/Out-of-Network: Covered in full. Age 35-39: one baseline mammogram; Age 40-49; One mammogram every two calendar years; Age 50+ One mammogram per calendar year.

## Section VI Summary of Principal Plan Provisions

Benefit	Kaiser Permanente	United HealthCare	POS Standard	POS High
Maternity	Covered in full once pregnancy is diagnosed.	No copayment applies after the first visit.	In-Network: first visit 100% after \$30 copay; other visits 100% Out-of-Network: 80% covered after deductible	In-Network: First visit 100% after \$10 copay; other visits 100% Out-of-Network: 80% covered after deductible
Maximum Lifetime Benefit	Unlimited maximum.	Unlimited maximum.	In-Network/Out-of-Network: Unlimited maximum	In-Network/Out-of-Network: Unlimited maximum
Out-of-Pocket Annual Maximum	None	\$1,100 per individual up to cap of \$3,600 for a family.	In-Network: Individual: \$1,000 plus the annual deductible; Family: \$2,000 plus the annual deductible; Out-of-Network: Individual: \$2,000 plus the annual deductible; Family: \$4,000 plus the annual deductible.	In-Network: Individual: \$1,000 plus the annual deductible; Family: \$2,000 plus the annual deductible; Out-of-Network: Individual: \$2,000 plus the annual deductible; Family: \$4,000 plus the annual deductible.
Physical	Covered in full.	\$5 copay PCP	In-Network: \$15 copay Primary Care Physician; \$30 copay specialist Out-of-Network: 80% covered after deductible (limit 1/calendar year)	In-Network: \$10 copay Out-of-Network: 80% covered after deductible (limit 1/calendar year)
Prescriptions	Kaiser Rx plan (included with Kaiser HMO medical plan): \$5 at on-site pharmacies and for mail order; \$15 at participating pharmacies.	No Rx Plan included; diabetic supplies covered under a pharmacy rider.	In-Network/Out-of-Network: No Rx Plan included; diabetic supplies covered under a pharmacy rider.	In-Network/Out-of-Network: No Rx Plan included; diabetic supplies covered under a pharmacy rider.

## Section VI Summary of Principal Plan Provisions

Benefit	Kaiser Permanente	United HealthCare	POS Standard	POS High
Skilled Nursing Facility	Covered in full; 100 days maximum	Covered in full; 60 days per calendar year maximum.	In-Network: Covered in full (100 days max/calendar year) Out-of-Network: 80% covered after deductible (100 days max/calendar year).	In-Network: Covered in full (100 days max/calendar year) Out-of-Network: 80% covered after deductible (100 days max/calendar year).
Specialists	\$5 copay	\$10 copay	In-Network: \$30 copay; Out-of-Network: 80% covered after deductible	In-Network: \$10 copay; Out-of-Network: 80% covered after deductible
Substance Abuse/Mental Health	Inpatient: Covered in full; Outpatient: \$5 copay	Inpatient: Covered in full; Outpatient: \$5 copay	In-Network: Inpatient-\$150 per admission; Outpatient- \$15 Out-of-Network: Inpatient- 80% covered after deductible; Outpatient- 80% covered after deductible.	In-Network: Inpatient covered in full; Outpatient- \$10 copay; Out-of-Network: Inpatient- 80% covered after deductible; Outpatient- 80% covered after deductible.
Surgery	Covered in full.	Inpatient: covered in full; Outpatient: \$25 copay	In-Network: Covered in full Out-of-Network: 80% covered after deductible	In-Network: Covered in full Out-of-Network: 80% covered after deductible
Vision (Routine)	\$5 copay for exams; 25% discount on lenses/frames at Kaiser centers; 15% discount off the costs of contact lenses.	\$25 copay for exam; 15-20% discount through participating optical centers.	In-Network: Refraction not covered; (pediatric visual screening - covered in full under well child care). Out-of-Network: Refraction not covered (pediatric visual screening - 80% not subject to deductible under well childcare).	In-Network: Refraction not covered; (pediatric visual screening - covered in full under well child care). Out-of-Network: Refraction not covered (pediatric visual screening - 80% not subject to deductible under well childcare).
Well Child Care	Well baby/well child covered in full up to age 5.	\$5 copay PCP	In-Network: \$15 copay Out-of-Network: 80% not subject to deductible (up to age 18).	In-Network: \$15 copay Out-of-Network: 80% not subject to deductible (up to age 18).

## Section VII Valuation Methods and Assumptions

### Valuation Date

July 1, 2019

### Actuarial Cost Method

Projected Unit Credit Cost Method

### Discount Rate

7.50%

### Total Payroll Increases

3.00%

### Party Responsible for Assumptions used in this valuation

Montgomery County Government

### Coverage Status

For participants who are inactive on the valuation date, the actual medical and life coverage provided by Montgomery County was used

For participants who are active employees on the valuation date, 87% are assumed to elect employee health insurance at retirement. 100% are assumed to elect Life Insurance coverage upon retirement.

### Percent Married and Age of Spouse

Females are assumed to be 3 years younger than male spouse; 60% of active employees are assumed to cover a spouse upon retirement.

### Amortization of the Unfunded Liability

The unfunded actuarial accrued liability is amortized over an open 30-year period using level percentage of pay.

## Section VII Valuation Methods and Assumptions

### Trend Assumptions

The medical trend assumption was developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model, version 2019\_b. The SOA model is flexible and allows for adjustments that ultimately control how quickly the current trend converges to the percentage increase in the GDP. Montgomery County has selected the following assumptions were used as input variables into the SOA model:

Rate of Inflation	2.4%
Rate of Growth in Real Income / GDP per capita	1.25%
Excess Medical Growth	1.2%
Expected Health Share of GDP in 2028	20.5%
Health Share of GDP Resistance Point	15.0%
Year for Limiting Cost Growth to GDP Growth	2040

Year	Pre Medicare Medical and Drug	Post Medicare Medical and Drug
2019	5.40%	5.40%
2020	5.40%	5.40%
2025	5.06%	5.06%
2030	4.16%	4.16%
2040	3.68%	3.68%
2050	3.68%	3.68%
2060	4.12%	3.68%
2070	4.06%	3.68%
2080	4.00%	3.68%
2090	3.96%	3.68%
2093 and after	3.94%	3.68%

Total premiums, total medical costs, and assumed costs are assumed to increase with medical trend shown above. The pre-65 medical trend was not increased to reflect the impact of the Cadillac Tax.

## Section VII Valuation Methods and Assumptions

### Salary Scale

The following table illustrates the salary merit scale. The rates described below do not include the inflation component assumption of 3.00%.

Service	Group A, H	Group E, J	Group F	Group G	GRIP
0	4.25%	7.00%	5.25%	8.25%	4.25%
1	4.25%	7.00%	5.25%	8.25%	4.25%
2	3.25%	6.75%	5.00%	6.75%	3.25%
3	2.75%	5.50%	4.75%	5.25%	2.75%
4	2.75%	4.25%	4.50%	4.75%	2.75%
5	2.75%	3.75%	4.25%	4.25%	2.75%
6	2.50%	3.25%	3.25%	4.25%	2.50%
7	2.50%	3.25%	3.00%	4.25%	2.50%
8	2.50%	2.75%	3.00%	4.25%	2.50%
9	2.25%	2.25%	2.50%	4.25%	2.25%
10	2.25%	2.25%	2.50%	4.25%	2.25%
11	1.75%	2.25%	2.25%	2.75%	1.75%
12	1.75%	2.25%	2.25%	2.75%	1.75%
13	1.75%	2.25%	2.25%	2.75%	1.75%
14	1.75%	2.25%	2.25%	2.75%	1.75%
15	1.75%	2.25%	2.25%	2.75%	1.75%
16	1.50%	2.00%	2.00%	1.75%	1.50%
17	1.50%	2.00%	1.75%	1.75%	1.50%
18	1.50%	2.00%	1.50%	1.75%	1.50%
19	1.50%	1.75%	1.50%	1.75%	1.50%
20	1.50%	1.75%	1.50%	1.75%	1.50%
21	1.50%	1.50%	0.75%	0.75%	1.50%
22	1.25%	1.25%	0.75%	0.75%	1.25%
23	1.25%	1.25%	0.75%	0.75%	1.25%
24	1.25%	1.25%	0.75%	0.75%	1.25%
25	1.00%	1.25%	0.75%	0.75%	1.00%
26	1.00%	1.25%	0.50%	0.75%	1.00%
27	1.00%	1.25%	0.50%	0.75%	1.00%
28	1.00%	1.00%	0.50%	0.75%	1.00%
29	1.00%	1.00%	0.50%	0.75%	1.00%
30 +	0.50%	0.50%	0.50%	0.50%	0.50%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Below is a summary of decrements used in this valuation. Sample retirement, disability, and termination rates are illustrated in the tables below. The decrement assumptions, with the exception of the mortality assumption, are based on the 2019 Montgomery County Employees' Retirement System experience study. The mortality assumption is the head-count weighted version of the mortality assumption described in the experience study.

Mortality Decrements	Description
(1) Healthy	<p>Group A, H, J, GRIP – Pub-2010 Healthy Mortality, Headcount weighted, General Employees, Sex Distinct, Fully Generational projected from 2010 using scale MP-2018</p> <p>Group E, F, G – Pub-2010 Healthy Mortality, Headcount weighted, Public Safety Employees, Sex Distinct, Fully Generational projected from 2010 using scale MP-2018</p>
(2) Disabled	<p>Group A, H, J, GRIP – Pub-2010 Disabled Mortality, Headcount weighted, General Employees, Sex Distinct, Fully Generational projected from 2010 using scale MP-2018</p> <p>Group E, F, G – Pub-2010 Disabled Mortality, Headcount weighted, Public Safety Employees, Sex Distinct, Fully Generational projected from 2010 using scale MP-2018</p>

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Retirement - Groups A and H (Non-Public Safety)		
Age	Years of Service	
	< 30	30 or more
< 45	0.00%	0.00%
45	2.00%	2.00%
46	2.00%	2.00%
47	2.00%	2.00%
48	2.00%	2.00%
49	2.00%	2.00%
50	3.00%	12.50%
51	3.00%	12.50%
52	3.00%	12.50%
53	3.00%	12.50%
54	3.00%	12.50%
55	6.00%	15.00%
56	6.00%	15.00%
57	6.00%	15.00%
58	6.00%	15.00%
59	6.00%	15.00%
60	11.00%	18.00%
61	13.00%	18.00%
62	14.00%	18.00%
63	11.00%	18.00%
64	11.00%	18.00%
65	15.00%	18.00%
66	22.00%	25.00%
67	20.00%	20.00%
68	20.00%	20.00%
69	20.00%	20.00%
70	30.00%	35.00%
71	30.00%	35.00%
72	30.00%	35.00%
73	30.00%	35.00%
74	30.00%	35.00%
75 +	100.00%	100.00%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Age	Retirement – Group E						
	Years of Service						
	0-14	15 - 17	18	19-24	25 - 27	28	29+
< 42	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
42	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
43	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
44	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
45	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
46	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
47	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
48	3.50%	3.50%	3.50%	3.50%	3.50%	18.00%	6.50%
49	5.00%	5.00%	5.00%	5.00%	6.00%	30.00%	16.00%
50	7.50%	7.50%	7.50%	7.50%	6.00%	30.00%	16.00%
51	7.50%	7.50%	7.50%	7.50%	6.00%	30.00%	16.00%
52	7.50%	7.50%	7.50%	7.50%	6.00%	30.00%	16.00%
53	7.50%	7.50%	7.50%	7.50%	6.00%	30.00%	16.00%
54	7.50%	7.50%	7.50%	7.50%	6.00%	30.00%	16.00%
55	15.00%	4.50%	25.00%	15.00%	30.00%	30.00%	24.00%
56	15.00%	4.50%	25.00%	15.00%	30.00%	30.00%	24.00%
57	15.00%	4.50%	25.00%	15.00%	30.00%	30.00%	24.00%
58	15.00%	4.50%	25.00%	15.00%	30.00%	30.00%	24.00%
59	15.00%	4.50%	25.00%	15.00%	30.00%	30.00%	24.00%
60	15.00%	4.50%	50.00%	15.00%	30.00%	30.00%	24.00%
61	15.00%	4.50%	50.00%	15.00%	30.00%	30.00%	24.00%
62	15.00%	4.50%	50.00%	15.00%	30.00%	30.00%	24.00%
63	15.00%	4.50%	50.00%	15.00%	30.00%	30.00%	24.00%
64	15.00%	4.50%	50.00%	15.00%	30.00%	30.00%	24.00%
65	50.00%	15.00%	85.00%	50.00%	50.00%	50.00%	40.00%
66	50.00%	15.00%	85.00%	50.00%	50.00%	50.00%	40.00%
67	50.00%	15.00%	85.00%	50.00%	50.00%	50.00%	40.00%
68	50.00%	15.00%	85.00%	50.00%	50.00%	50.00%	40.00%
69	50.00%	15.00%	85.00%	50.00%	50.00%	50.00%	40.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Age	Retirement - Group F			
	Years of Service			
	<26	26 - 27	28	29 +
< 42	2.50%	1.25%	10.00%	7.50%
42	2.50%	1.25%	10.00%	7.50%
43	2.50%	1.25%	10.00%	7.50%
44	2.50%	1.25%	10.00%	7.50%
45	2.50%	1.25%	10.00%	7.50%
46	3.00%	1.50%	10.00%	7.50%
47	4.00%	2.00%	10.00%	7.50%
48	4.00%	2.00%	10.00%	7.50%
49	4.00%	2.00%	10.00%	7.50%
50	8.00%	4.00%	18.00%	13.50%
51	8.00%	4.00%	18.00%	13.50%
52	8.00%	4.00%	18.00%	13.50%
53	8.00%	4.00%	20.00%	15.00%
54	12.00%	6.00%	20.00%	15.00%
55	12.00%	6.00%	50.00%	26.25%
56	12.00%	6.00%	50.00%	26.25%
57	15.00%	7.50%	50.00%	26.25%
58	15.00%	7.50%	50.00%	26.25%
59	15.00%	7.50%	50.00%	26.25%
60	20.00%	10.00%	65.00%	37.50%
61	20.00%	10.00%	65.00%	37.50%
62	20.00%	10.00%	65.00%	37.50%
63	25.00%	12.50%	65.00%	37.50%
64	25.00%	12.50%	65.00%	37.50%
65	100.00%	50.00%	100.00%	100.00%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Age	Retirement – Group G Years of Service			
	Under 20 and 24 - 27 YOS	20 - 22	23	28+
< 42	2.50%	0.75%	2.50%	1.75%
42	5.00%	1.50%	5.00%	3.50%
43	5.00%	1.50%	5.00%	3.50%
44	5.00%	1.50%	5.00%	3.50%
45	5.00%	1.50%	15.00%	5.25%
46	5.00%	1.50%	15.00%	5.25%
47	5.00%	1.50%	15.00%	5.25%
48	5.00%	1.50%	15.00%	7.00%
49	10.00%	3.00%	20.00%	7.00%
50	10.00%	3.00%	20.00%	7.00%
51	10.00%	3.00%	20.00%	12.25%
52	12.50%	3.75%	22.50%	14.00%
53	12.50%	3.75%	22.50%	14.00%
54	12.50%	3.75%	22.50%	14.00%
55	15.00%	4.50%	25.00%	21.00%
56	15.00%	4.50%	25.00%	21.00%
57	15.00%	4.50%	25.00%	21.00%
58	15.00%	4.50%	25.00%	28.00%
59	15.00%	4.50%	25.00%	28.00%
60	30.00%	9.00%	40.00%	28.00%
61	30.00%	9.00%	40.00%	28.00%
62	30.00%	9.00%	40.00%	28.00%
63	30.00%	9.00%	40.00%	28.00%
64	30.00%	9.00%	40.00%	28.00%
65	100.00%	50.00%	100.00%	100.00%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Retirement – Group J		
Years of Service		
Age	<25 YOS	25 + YOS
< 42	3.50%	3.50%
42	3.50%	3.50%
43	3.50%	3.50%
44	3.50%	3.50%
45	3.50%	8.00%
46	3.50%	8.00%
47	3.50%	8.00%
48	3.50%	8.00%
49	5.00%	20.00%
50	7.50%	20.00%
51	7.50%	20.00%
52	7.50%	20.00%
53	7.50%	20.00%
54	7.50%	20.00%
55	15.00%	30.00%
56	15.00%	30.00%
57	15.00%	30.00%
58	15.00%	30.00%
59	15.00%	30.00%
60	15.00%	30.00%
61	15.00%	30.00%
62	15.00%	30.00%
63	15.00%	30.00%
64	15.00%	30.00%
65	50.00%	50.00%
66	50.00%	50.00%
67	50.00%	50.00%
68	50.00%	50.00%
69	50.00%	50.00%
70	100.00%	100.00%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Age	Retirement Group GRIP	
	<15 YOS	15 + YOS
< 55	0.00%	0.00%
55	3.00%	3.00%
56	3.00%	3.00%
57	4.50%	5.00%
58	4.50%	6.00%
59	4.50%	6.50%
60	4.50%	7.00%
61	4.50%	7.50%
62	7.00%	15.00%
63	7.00%	15.00%
64	10.00%	15.00%
65	13.00%	20.00%
66	13.00%	20.00%
67	13.00%	25.00%
68	13.00%	25.00%
69	13.00%	30.00%
70	25.00%	50.00%
71	25.00%	50.00%
72	30.00%	50.00%
73	30.00%	50.00%
74	30.00%	50.00%
75 +	100.00%	100.00%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Age	Disability							
	Group A, H		Group E, J		Group F		Group G	
	Males	Females	Males	Females	Males	Females	Males	Females
20 - 24	0.02%	0.01%	0.04%	0.03%	0.07%	0.11%	0.11%	0.12%
25 - 29	0.04%	0.02%	0.07%	0.08%	0.13%	0.28%	0.18%	0.31%
30 - 34	0.07%	0.05%	0.14%	0.17%	0.25%	0.61%	0.36%	0.68%
35 - 39	0.13%	0.09%	0.26%	0.28%	0.46%	1.02%	0.66%	1.13%
40 - 44	0.20%	0.17%	0.40%	0.52%	0.69%	1.86%	0.99%	2.07%
45 - 49	0.40%	0.28%	0.80%	0.86%	1.39%	3.10%	1.99%	3.44%
50 - 54	0.61%	0.34%	1.22%	1.06%	2.13%	3.83%	3.04%	4.25%
55 - 59	0.76%	0.35%	1.51%	1.08%	2.65%	3.90%	3.79%	4.34%
60 - 64	0.76%	0.35%	1.51%	1.08%	2.65%	3.90%	3.79%	4.34%
65 - 69	0.76%	0.35%	1.51%	1.08%	2.65%	3.90%	3.79%	4.34%

## Section VII Valuation Methods and Assumptions

### Decrement Assumptions

Years of Service	Termination					
	Group A, H, GRIP		Group E, J		Group F, G	
	Males	Females	Males	Females	Males	Females
0	11.50%	12.00%	16.00%	16.00%	7.00%	10.50%
1	11.50%	12.00%	16.00%	16.00%	7.00%	10.50%
2	9.00%	11.00%	10.00%	14.00%	4.00%	5.00%
3	8.50%	9.00%	6.00%	12.00%	3.50%	4.50%
4	6.50%	8.00%	5.00%	10.00%	3.00%	4.00%
5	6.00%	7.50%	5.00%	8.00%	2.50%	3.50%
6	5.50%	6.50%	5.00%	6.00%	2.25%	3.00%
7	5.00%	5.50%	5.00%	4.00%	2.00%	2.75%
8	4.50%	4.50%	5.00%	4.00%	1.75%	2.50%
9	4.00%	3.50%	4.00%	4.00%	1.50%	2.00%
10	4.00%	3.00%	3.00%	3.00%	1.25%	1.75%
11	3.00%	2.75%	2.00%	2.00%	1.00%	1.00%
12	3.00%	2.75%	1.50%	1.00%	0.75%	0.75%
13	3.00%	2.75%	1.00%	1.00%	0.50%	0.50%
14	3.00%	2.75%	1.00%	1.00%	0.25%	0.25%
15	3.00%	2.75%	1.00%	1.00%	0.25%	0.25%
16	2.50%	2.50%	1.00%	1.00%	0.25%	0.25%
17	2.50%	2.50%	1.00%	1.00%	0.25%	0.25%
18	2.50%	2.50%	1.00%	1.00%	0.25%	0.25%
19	2.50%	2.50%	1.00%	1.00%	0.25%	0.25%
20	2.50%	2.50%	1.00%	1.00%	0.25%	0.25%
21	2.00%	2.00%	1.00%	1.00%	0.25%	0.25%
22	2.00%	2.00%	1.00%	1.00%	0.25%	0.25%
23	2.00%	2.00%	1.00%	1.00%	0.25%	0.25%
24	2.00%	2.00%	1.00%	1.00%	0.25%	0.25%
25 +	2.00%	2.00%	1.00%	1.00%	0.25%	0.25%

### Claims Assumption

To determine the pre-Medicare assumed cost, we weighted the FYE 2019 pre-Medicare premium rates by the current enrollment. To determine the post-Medicare assumed cost, we weighted the Carefirst Standard and High plan premium rates by the current enrollment.

Gross claims for retirees are based on enrollment and paid medical claims and prescription for employees and retirees paid from May 1, 2018 to April 30, 2019. Claims were projected assuming annual increases of 5% for medical claims and 8% prescription drug claims. Medical claims were adjusted 1% to account for IBNR. Pre-Medicare prescription drug claims were reduced 33% and post-Medicare prescription drug claims were reduced 48% to account for projected improvements in prescription drug rebates; post-Medicare drug claims were also adjusted to account for EGWP reimbursements. The average weighted claims were then age adjusted using aging factors developed using CMS data.

## Section VII Valuation Methods and Assumptions

### Claims Assumption

Administrative costs of \$455 per annum were assumed for the pre age 65 claims. Pre Medicare family coverage is assumed to be 2.06 times the cost of individual coverage for the same age band. Post Medicare family coverage is assumed to be 2.00 times the cost of individual coverage for the same age band.

The following chart shows explicit costs (based on published rates), and total medical and drug cost. The explicit and total cost is split by pre vs. post-Medicare, single vs. family coverage.

FYE 2020		
Total Costs (per annum)	Single	Family
1. Assumed Costs (Explicit Costs)		
a. Pre-Medicare	8,329	17,158
b. Medicare Age	6,963	13,926
2. Total Medical Costs (includes prescription drugs)		
a. Under 50	7,946	16,368
b. Age 50-54	9,681	19,943
c. Age 55-59	11,299	23,277
d. Age 60-64	13,364	27,530
e. Age 65-69	5,068	10,136
f. Age 70-74	5,891	11,782
g. Age 75-80	6,045	12,090
h. Age 80-84	6,350	12,700
i. Over Age 85	6,231	12,462

These amounts do not include dental costs of \$444 for individuals and \$1,074 for employee/spouse or family coverage.

## Section VII Valuation Methods and Assumptions

### Other Assumptions

- No identifier was provided for the inactive population on the data. All inactive participants are assumed to be general employees.
- Participants were determined to be in a participating agency using the key illustrated below.

Work Location Key - Inactives	
Work Location	Agency Mapping
101 Monroe (EOB)	Montgomery County Government
Assessment and Taxation	State Department of Assessment and Taxation
Circuit Court Judges	Montgomery County Government
CRU-Credit Union	Montgomery County Employees Federal Credit Union
District Court	Montgomery County Government
District Court Judges (GIF ER)	Montgomery County Government
District Court Judges (State ER)	Montgomery County Government
Division of Parole and Probation	Montgomery County Government
Housing Opportunities Commission	Housing Opportunities Commission of Montgomery County
Revenue Authority	Montgomery County Revenue Authority
Strathmore Hall	Strathmore Hall Foundation, Inc.
Village of Friendship Heights	Village of Friendship Heights
Washington Suburban Transit Commission	Washington Suburban Transit Commission

HR_Org Key - Actives	
HR_Org	Agency Mapping
All remaining HR_Org fields not described below	Montgomery County Government
CRU 92 Credit Union	Montgomery County Employees Federal Credit Union
Housing Opportunities Commission	Housing Opportunities Commission of Montgomery County
Revenue Authority	Montgomery County Revenue Authority
Strathmore Hall	Strathmore Hall Foundation, Inc.
Village of Friendship Heights	Village of Friendship Heights
Washington Suburban Transit Commission	Washington Suburban Transit Commission

### Changes in methods and assumptions since prior valuation

- The claims assumption was updated to include the most recent plan experience.
- The medical trend was updated to the latest SOA long term medical trend.
- The salary scale and inflation assumptions were updated to reflect the proposed changes summarized in the 2019 Montgomery County Employees' Retirement System experience study
- Retirement, Termination, Disability, and Mortality assumptions were updated to reflect the proposed changes summarized in the 2019 Montgomery County Employees' Retirement System experience study

## Section VIII Glossary

### Actuarially Determined Contribution:

For Plans with irrevocable trusts, the recommended contribution to the Plan (determined in conformity with Actuarial Standards of Practice) that is projected to result in assets equaling the actuarial accrued liability within a period of time.

### Covered Group:

Plan members included in an actuarial valuation.

### Discount Rate:

The rate used to adjust a series of future payments to reflect the time value of money.

### Election Rate:

The percentage of retiring employees assumed to elect coverage.

### Employer's Contributions:

Contributions made in relation to the actuarially determined contributions of the employer (ADC). An employer has made a contribution in relation to the ADC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or an equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.

### Entry Age Normal Funding Method:

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit.

### Funded Ratio:

The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

### Healthcare Cost Trend Rate:

The rate of change in per capita health claim costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

### Measurement Date:

A day selected by the local government from the last day of the prior fiscal year to the last day of the current fiscal year. The measurement date is not necessarily the same date as the valuation date.

## Section VIII Glossary

### OPEB Plan:

An OPEB plan having terms that specify the amount of benefits to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

### Other Post-Employment Benefits:

Post-employment benefits other than pension benefits. Other post-employment benefits (OPEB) include post-employment healthcare benefits, life insurance, regardless of the type of plan that provides them, and all post-employment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

### Pay-as-you-go (PAYGO):

A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

### Payroll Growth Rate:

An actuarial assumption with respect to future increases in total covered payroll attributable to inflation; used in applying the level percentage of projected payroll amortization method.

### Plan Liabilities:

Obligations payable by the plan at the reporting date, including, primarily, benefits and refunds due and payable to plan members and beneficiaries, and accrued investment and administrative expenses. Plan liabilities do not include actuarial accrued liabilities for benefits that are not due and payable at the reporting date.

### Plan Members:

The individuals covered by the terms of an OPEB plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.

### Post-employment:

The period between termination of employment and retirement as well as the period after retirement.

### Post-employment Healthcare Benefits:

Medical, dental, vision, and other health-related benefits provided to terminated or retired employees and their dependents and beneficiaries.

## Section VIII Glossary

### Select and Ultimate Rates:

Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 2000, 7.5% for 2001, and 7% for 2002 and thereafter, then 8% and 7.5% are select rates, and 7% is the ultimate rate.

### Service Cost:

That portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

### Valuation Date:

The as-of date for employee census data. Under GASB 75, the valuation date must be within 30 months of the last day of the fiscal year.

# Appendix 1. The Actuarial Valuation Process

## Step 1 – Determining the Present Value of Benefits

The first step of the actuarial valuation process is to determine the Present Value of Benefits (PVB). The PVB represents the estimated amount needed to provide all future OPEB benefits.

For a retiree it is based on the following assumptions:

- The current cost of medical benefits
- How fast medical costs will increase (medical trend)
- Mortality

For an employee it *also* considers the following assumptions:

- How many employees will leave before becoming eligible for the benefit
- At what age will employees retire
- What percentage of eligible retirees will elect coverage
- What percent of eligible retirees will have spouse coverage

Based on these assumptions, the actuary estimates a payment stream for each year in the future.

The streams of payments are discounted to the valuation date using a discount rate. The discount rate is similar to the rate of return you would expect to earn on funds in a bank or other investment vehicle. The sum of the discounted payment stream is the PVB.

## Step 2 – The Actuarial Funding Method

If the entire present value of benefits was deposited into a trust when every new employee was hired, there would be (in the absence of actuarial losses caused by experience different than that assumed) no cost after the first year. The goal of an actuarial funding method is to spread the present value of benefits throughout the employee's career.

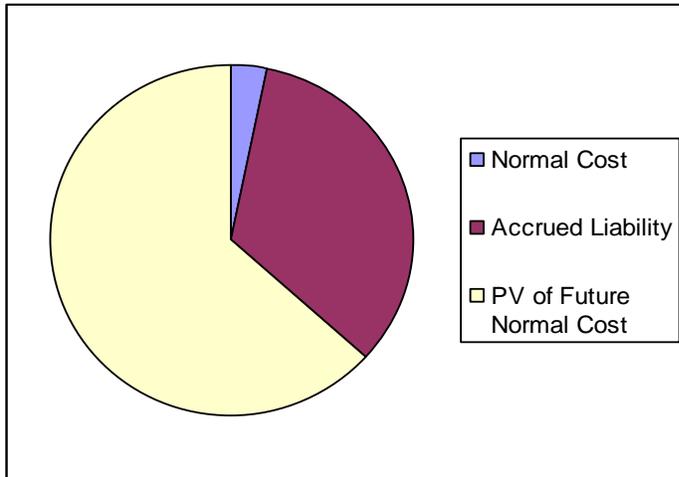
Accordingly, the second step of an actuarial valuation is to divide the Present Value of Benefits into three components:

- The normal cost (the liability accrual for the year)
- The accrued liability (the liability amount allocated for past service)
- The present value of future normal costs (the liability amount allocated to the future)

# Appendix 1 - The Actuarial Valuation Process

## Step 2 – The Actuarial Funding Method

The following chart illustrates the 3 components of the Present Value of Benefits:



For a retired employee, the present value of benefits equals the accrued liability.

The ADC is determined using the Projected Unit Credit Actuarial Funding method. The GASB 75 accounting standard requires the use of the Entry Age Normal Actuarial Funding Method.

### The Projected Unit Credit (PUC) Actuarial Funding Method

The PUC method allocates the present value of benefits by the service at valuation date divided by the service at retirement. So, for an employee with 10 years of service who is expected to retire in 20 years with 30 years of service, the actuarial accrued liability would be one third (10 divided by 30) of the present value of benefits.

### The Entry Age Normal (EAN) Actuarial Funding Method

The goal of the EAN method is that the annual accrual (or normal cost) be a level percent of pay throughout an employee's career. This method requires a salary increase assumption. The normal cost percentage is equal to the present value of benefits divided by the present value of future salary determined when the employee was hired. The actuarial accrued liability is equal to the present value of benefits minus the normal cost percentage times the present value of future salaries at the valuation date.

While it depends upon the discount rate and the salary increase assumption generally the EAN method has a higher actuarial accrued liability than the PUC Method.